Release notes for ENDF/B Development e-048_Cd_000 evaluation



October 13, 2016

• fudge-4.0 Warnings:

1. Mislabled emitted particle Reading ENDF file: ../e-048_Cd_000.endf (Error # 0): ZAP messed up

WARNING: photon most likely labelled as an electron (ZAP = 11), converting to ZAP = 0

2. FIXME: Generic fudge unimplemented message reaction label 1: e- + Cd + gamma [bremsstrahlung] / Product: e- (Error # 0): Generic unimp (c)

WARNING: Checking not yet implemented for energyLoss type data

3. FIXME: Generic fudge unimplemented message reaction label 2: e- + Cd [excitation] / Product: e- (Error # 0): Generic unimp (c)

WARNING: Checking not yet implemented for energyLoss type data

• fudge-4.0 Errors:

1. Calculated and tabulated thresholds don't agree reaction label 0: e- + Cd [large angle Coulomb scattering] / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 10. eV!

2. Calculated and tabulated thresholds don't agree reaction label 1: e- + Cd + gamma [bremsstrahlung] / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 10. eV!

3. Calculated and tabulated thresholds don't agree reaction label 2: e- + Cd [excitation] / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 10. eV!

4. Calculated and tabulated thresholds don't agree reaction label 3: e- + e- + Cd1s1/2 / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 26688. eV!

5. Calculated and tabulated thresholds don't agree reaction label 4: e- + e- + Cd2s1/2 / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 3994.1 eV!

6. Calculated and tabulated thresholds don't agree reaction label 5: e- + e- + Cd2p1/2 / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 3730.9 eV!

7. Calculated and tabulated thresholds don't agree reaction label 6: e- + e- + Cd2p3/2 / Cross section: (Error # 0): Threshold mismatch

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WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 3535.4 eV!
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- 8. Calculated and tabulated thresholds don't agree reaction label 7: e- + e- + Cd3s1/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 755.37 eV!
- 9. Calculated and tabulated thresholds don't agree reaction label 8: e- + e- + Cd3p1/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 647.79 eV!
- 10. Calculated and tabulated thresholds don't agree reaction label 9: e- + e- + Cd3p3/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 612.63 eV!
- 11. Calculated and tabulated thresholds don't agree reaction label 10: $e^- + e^- + Cd3d3/2$ / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 420.06 eV!
- 12. Calculated and tabulated thresholds don't agree reaction label 11: e- + e- + Cd3d5/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 412.86 eV!
- 13. Calculated and tabulated thresholds don't agree reaction label 12: e- + e- + Cd4s1/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 113.36 eV!
- 14. Calculated and tabulated thresholds don't agree reaction label 13: e- + e- + Cd4p1/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 78.22 eV!
- 15. Calculated and tabulated thresholds don't agree reaction label 14: e- + e- + Cd4p3/2 / Cross section: (Error <math># 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 72.19 eV!
- 16. Calculated and tabulated thresholds don't agree reaction label 15: e- + e- + Cd4d3/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 17.71 eV!
- 17. Calculated and tabulated thresholds don't agree reaction label 16: e- + e- + Cd4d5/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 16.97 eV!
- 18. Calculated and tabulated thresholds don't agree reaction label 17: e- + e- + Cd5s1/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 8.220000000000001 eV!

• xsectplotter Warnings:

 $\begin{array}{ccc} 1. & {\rm Mislabled~emitted~particle} \\ & \textit{Error:~ZAP~messed~up} \end{array}$

 ${\tt stderr} \ {\tt while} \ {\tt processing} \ {\tt crossSection}$

WARNING: photon most likely labelled as an electron (ZAP = 11), converting to ZAP = 0 \dots [2 more lines]